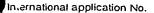


PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER see Notification	of Transmittal of International Search Report
NP/48/03	ACTION (Form PCT/ISA	v220) as well as, where applicable, item 5 below.
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/SG 03/00065	28/03/2003.	30/05/2002
Applicant		<u> </u>
HVDDODALI. TEQUINA		•
HYDROBALL TECHNICS PTE LT	<u>D</u>	
This International Search Report has been according to Article 18. A copy is being tra	n prepared by this International Searching Au ansmitted to the International Bureau.	thority and is transmitted to the applicant
This International Sparch Department	2	
This International Search Report consists It is also accompanied by	of a total of3 sheets. a copy of each prior art document cited in thi	
	a copy of each phot art document cited in this	s report.
1. Basis of the report		
a. With regard to the language, the i	nternational search was carned out on the ba	Sis of the international application in the
anguage in which it was filed, unle	ess otherwise indicated under this item.	and a war and a spin cation in the
• • • • • • • • • • • • • • • • • • • •	as carried out on the basis of a translation of	
 With regard to any nucleotide and was carried out on the basis of the 	for amino acid sequence disclosed in the in	nternational application, the international search
	sequence listing: nal application in written form.	osaidi,
	national application in computer readable form	_
	this Authority in written form.	,
	his Authority in computer readble form.	•
the statement that the subs	equently furnished written socuence listing a	Des not go beyond the disclosure in the
	mee the been termoned.	·
furnished	mation recorded in computer readable form is	identical to the written sequence listing has been
	l unsearchable (See Box I).	
Unity of invention is lacking	ng (see Box II).	
No.		
. With regard to the title,		
the text is approved as subm		•
the text has been established	d by this Authority to read as follows:	
		:
With regard to the abstract,		
	SMad L. B	
the text is approved as subm	d according to Bule 38 3/h) by this Authority	oo ii oo o
	ne or maining or this international search repo	rt, submit comments to this Authority.
The figure of the drawings to be publish	ed with the abstract is Figure No.	1
as suggested by the applicar		None of the figures.
17 .	la avenant a Ca	
because the applicant failed	to suggest a figure.	



INTERNATIONAL SEARCH REPORT

PCT/SG 03/00065

Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

A cleaning system for cleaning tubing using cleaning balls 20 circulated with the fluid through tubing 8. The system includes a separator 12 having a perforated funnel, which permits the fluid, but not the cleaning balls 20, to pass through. A housing 21 having an apertured partition 28 is used to divide the housing 21 into an first compartment 19 and a second compartment 27. An entrance 2 of a fluid supply pipe 23 and an exit 3 of a ball supply pipe 24 are formed for creating a difference in pressure to create a suction force to recirculate the cleaning balls 20 from the housing 21 via the ball supply pipe 24, back to the tubing 8 for cleaning the walls of the tubing 8. An entrance 13 of a ball return pipe 17 and an exit 14 of a fluid return pipe 16 are formed for creating a difference in pressure to create a suction force to recirculate the cleaning balls 20 from the separator 12 via the ball return pipe 17, into the housing 21.

· INTERNATIONAL SEARCH REPORT

national Application No . PCT/SG 03/00065

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 F28G1/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

F28G IPC 7

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

Category •	Citation of document, with indication, where appropriate, of the relevant passages	 Relevant to claim No.	
X	DE 12 47 359 B (HITACHI LTD) 17 August 1967 (1967-08-17) column 3, line 39 -column 5, line 18; figure	1,2,4-7	
Υ .		8-11	
Y -	GB 700 833 A (JOSEPH TAPROGGE) 9 December 1953 (1953-12-09) page 2, line 96 -page 3, line 8; figure 1 page 3, line 95 - line 106 page 4, line 3 - line 31; figures 4-7 page 4, line 83 - line 91; figures 12,13	8-11	
X	US 5 592 990 A (BEN-DOSA CHAIM) 14 January 1997 (1997-01-14) cited in the application	4	
(column 2, line 32 -column 4, line 56; figures	1-3,5-7	

Further documents are listed in the continuation of box C.	χ Patent family members are listed in annex.
Special categories of cited documents: 'A' document defining the general state of the art which is not considered to be of particular relevance 'E' earlier document but published on or after the international filling date 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) 'O' document referring to an oral disclosure, use, exhibition or other means 'P' document published prior to the international filling date but later than the priority date claimed	 'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention 'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone 'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. '&' document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the international search report
20 June 2003	26/06/2003
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentiann 2 NL - 2280 HV Rijswijk	Authorized officer
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl. Fax: (+31-70) 340-3016	Van Dooren, M

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C.(Continu	alion) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

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